

✓ Claims :

- 1) A new and distinct somaclonal variety of rose scented geranium "Parimal" having the following characteristics:
  - (a) The variety being a somaclonal variant of *Pelargonium graveolens* cv. Hemanti raised through in vitro regeneration of callus cultures,
  - (b) Said variety having less dentated leaf phenotype with a huge round canopy and extensive branching behavior
  - (c) said variety having inherited oil quality with nearly equal content of citronellol and geraniol which is commercially superior than the parent
  - (d) Having higher oil yielding ability owing to its higher herb yield than the parent cultivar Hemanti
  - (e) Said variety exhibiting the following characteristics:

Serial no.	Morphological parameters	Parimal
1	Plant height	85-95 cm
2	Growth habit	spreading, round canopy
3	Stem	green, internodes 8-9 cms long, nodes pinkish
4	Branches	91-101
5	Leaf	
	number per branch	10-25
	texture	pubescent
	shape	thick, serrated with round lobes
	number of primary lobes	3
	secondary lobes	12-15
	Tip	Blunt

	Leaf area	20-28 cm <sup>2</sup>
	Petiole	~8 cm (pinkish)
6	Morphological marker	Less dentated leaf morphotype (Ldl)
7	Leaf / stem ratio (L/S)	2.1
8	Herb yield/ plant	4.5 kgs.
9	% oil content	0.18
10	Oil yield /plant	7.1 gms.
11	Oil yield (kg/ha)	71.1

f) yielding essential oil comprising

Essential constituents	Percentage (%)
Linalool	9.1
<i>Cis</i> + <i>Trans</i> rose oxide	0.60
Menthone	0.2
Isomenthone	7.8
Citronellol	27.6
Geraniol	22.6
Citronellyl formate	5.9
Geranyl formate	2.1
Citronellyl acetate	0.2
β-caryophyllene	0.2
6,9 guaiadiene	0.6
citronellyl butyrate	1.0
10 Epi-γ-eudesmol	7.3
Citronellyl tiglate	0.8

g) exhibiting uniqueness with respect to the following RAPD primers:

MAP-05, MAP-12, MAP-15 and MAP-16.